

What is claimed is:

1. A terminal assembly comprising:
a metallic body, the body having a bottom portion comprising an interior surface, an exterior surface, and at least one opening;
a current conducting pin extending longitudinally through the opening in the bottom portion; and
an injection-molded dielectric plastic resin covering at least portions of each of the interior surface and the opening of the bottom portion of the body, the plastic resin bonding to both the body and the pin and providing a seal between the pin and the opening in the bottom portion through which the pin is extending.
2. The terminal assembly of claim 1, wherein the plastic resin is molded in situ.
3. The terminal assembly of claim 1, wherein an adhesive is interposed between the plastic resin and the body.
4. The terminal assembly of claim 3, wherein an adhesive is interposed between the plastic resin and the pin.
5. The terminal assembly of claim 1, wherein the plastic resin is prefabricated and bonded to the metallic body and the pin with an adhesive.

6. The terminal assembly of claim 5, wherein the adhesive is an electrically insulating epoxy.

7. A hermetic terminal assembly comprising:

a metallic body, the body having a bottom portion, the bottom portion comprising an interior surface, an exterior surface and at least one opening having a wall;

a current-conducting pin extending longitudinally through the opening;

a prefabricated dielectric retainer receiving the pin and covering at least a portion of the interior surface and surrounding at least a portion of the wall; and

a dielectric epoxy bonding to the body, the retainer and the pin, and providing a seal between the pin and the opening in the bottom portion through which the pin is extending.

8. The terminal assembly of claim 7, wherein the exterior surface of the bottom portion includes a countersunk portion sealed with the epoxy.

9. The terminal assembly of claim 8, wherein the retainer includes an annular countersunk portion sealed with the epoxy.

10. The terminal assembly of claim 9, wherein the retainer includes a cavity communicating with the countersunk portion and sealed with the epoxy through the interior surface of the bottom portion.

11. The terminal assembly of claim 7, further including an adhesive on the interior surface of the body.

12. The terminal assembly of claim 7, further including an adhesive on the exterior surface of the body.

13. The terminal assembly of claim 7, wherein the retainer is formed from a plastic resin.

14. The terminal assembly of claim 7, wherein the retainer is formed from a ceramic.

15. The terminal assembly of claim 9, wherein the countersunk portion receives at least a portion of the wall of the body.

16. A hermetic terminal assembly comprising:

a metallic body, the body having a bottom portion, the bottom portion comprising an interior surface, an exterior surface and at least one opening having a wall;

a current-conducting pin extending longitudinally through the opening; and

a dielectric epoxy bonding to the interior and exterior surfaces of the body and the pin through the opening of the bottom portion, and providing a seal between the pin, the opening and the wall of the opening.

17. The terminal assembly of claim 16, further comprising a retainer placed over the pin and under the interior surface of the body.

18. The terminal assembly of claim 17, wherein the retainer includes an annular countersunk portion sealed with the epoxy.

19. The terminal assembly of claim 18, wherein the retainer includes a cavity communicating with the countersunk portion and sealed with the epoxy.

20. The terminal assembly of claim 16, wherein the body includes an annular countersunk portion sealed with the epoxy.

21. The terminal assembly of claim 17, further comprising an adhesive over at least a portion of the exterior surface of the body.

22. The terminal assembly of claim 17, further comprising an adhesive over at least a portion of the interior surface of the body.

23. A method for making a hermetic terminal assembly, the method comprising:

placing a terminal pin in a retainer;

placing a first epoxy ring over the pin and over the retainer;

placing a metallic body having a pin hole over the pin, the retainer and the first epoxy ring;

placing a second epoxy ring over the pin and over the body; and

curing the first and second epoxy rings to provide a seal between the pin and the pin hole of the body.

24. The method of claim 23, wherein curing includes heating the epoxy rings to cross link the epoxy.

25. The method of claim 24, wherein the retainer includes a cavity receiving epoxy overflow bonding the retainer to the body.

26. The method of claim 25, wherein the retainer includes a countersunk portion receiving the first ring, the countersunk portion communicating with the cavity.

27. The method of claim 23, further comprising supporting the pin on an assembly board.

28. The method of claim 23 further comprising coating the body with an adhesive.

29. A method for making a hermetic terminal assembly, the method comprising:

providing a terminal pin;

placing a first epoxy ring over the pin;

placing a metallic body having a pin hole over the pin and the first epoxy ring;

placing a second epoxy ring over the pin and over the body; and

curing the first and second epoxy rings to provide a seal between the pin and the pin hole of the body.